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ABSTRACT

Presented is an arithmetic instructional guide for teaching location and direction concepts to elementary special education students. It is explained that the guide is intended to be used as a supplement to the basic curriculum guide (EC 061 294) prepared by the Opelika, Alabama public schools. Provided is information on using the guide, terms such as percept and competency, the assessment and placement procedure, management of continuous progress learning, and teaching methods. A chart lists instructional materials needed for the 22 objectives of the plateau. Examples of objectives and instructional procedures include showing comprehension of the concept "across" or "front" and "back" by following instructions such as "walk across the room" and "draw a house on the front of your paper and a boy on the back". (DB)

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TEACHERS' INSTRUCTIONAL GUIDE

FOR

PRIMARY AND INTERMEDIATE SPECIAL EDUCATION

A Multi-sensory, Multi-level, Multi-media
Curriculum Project, Title III, ESEA, 1969-1972

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ARITHMETIC SKILLS

LOCATION AND DIRECTION

Plateau 2

This guide is a supplement to the basic curriculum guide, not a substitution for it. The teacher is cautioned to read the curriculum guide (especially the information on pages 20 and 21) prior to beginning the activities which are suggested for each of the performance objectives.

1972 Revised Edition

CG 061295

IMPORTANT NOTE

The information on pages 3-10 and page 13 are repeated in this plateau's guide for the teacher who may want to review guidelines. The information is the same for both plateau 1 and 2 EXCEPT page 11 and the sample instructional sheet on page 14.

There are only two plateaus for Location & Direction.

BEFORE YOU BEGIN INSTRUCTION...

The following steps are required to insure sequential and successful achievement by the learner:

1. The teacher is "ready". This guide assumes that the teacher has read the basic curriculum guide, especially pages 5-25, 113-121, and 297-298.

2. The teacher comprehends the learning theory utilized in the arithmetic program and the terms and purpose of the performance objectives.

See pages 5 and 6 of this guide for a review.

3. The teacher has evaluated the learner's capabilities, is certain of his "readiness" for arithmetic, and has assessed and placed the learner at his most appropriate point on the continuum.

See pages 7 and 8 of this guide for a review.

4. The teacher has studied the instructional materials chart (page 15 of this guide), acquired or produced the needed materials, and has prepared for the lesson.

See pages 9 through 13 of this guide for detailed "how to conduct the lesson" suggestions.

5. The teacher has determined the learners who can be grouped for instruction by study of their pupil progress record sheets. If two or more learners are not in need of instruction for the same objective, a one-to-one lesson will be required.

Objectives

Inherent in each objective is a request to the teacher to insure that the learner can do whatever the objective requires, to at least a degree of proficiency that will make the concept or skill useful to him in his daily life.

Each objective should be considered as the terminal performance expected as a result of (1) a prescribed series of systematic training steps based upon the "percept-to-concept-to-generalization" theory of learning or (2) opportunistic training the learner engaged in on his own initiative prior to a pre-test for the given objective.

Most objectives, particularly those in the arithmetic sequences, use several cognitive terms to describe desired terminal results. To insure unity of understanding, explanations of the most frequently used terms are given below.

Percept--Knowledge the learner can see, hear, feel, smell, or taste; usually a single concrete fact or process. Examples: an apple in a bowl, a ball in a box, a girl in a car. Each example is one of many percepts comprising the concept "in".

Concept--An abstract idea; usually a category for mental storage of related perceptions. Examples: in, fruit, food, human life necessities. The concept "in" has multiple percepts which relate to it, but alone it has no meaning; thus, percepts are required to form this concept. The concept "fruit" is a category which has no meaning unless percepts such as apple, orange, banana etc. are known. Concepts build into larger categories such as "food" (fruit, bread, meat, etc.) and "human life necessities" (food, shelter, clothing, etc.). The more complex the learner's conceptual framework the quicker the learner can comprehend given information.

Generalization--In the noun form, it is a general concept or principle, arrived at as a result of multiple concept relationships or repeated tests of specific skills, which can be applied to comprehend new knowledge or solve new problems. Examples: (1) a learner, by multiple percept to concept exposures, has derived the general concept that "fruit is food" (not universally true, but generally true) and is able to apply the generalization in the planning and purchase of food for family meals; or (2) a learner, by multiple specific skill experiences, has derived the general principle that a hacksaw blade will cut through metals (not universally true, but generally true) and is a ble to apply the generalization to any problem where metal cutting is the solution.

Retention--Ability to remember knowledge exactly as given during instruction. To show retention of a given percept, for example, the learner must be able to recognize the percept when he perceives it again and be able to prove he remembers it by accurate selection from among other percepts.

Comprehension--An intellectual skill which requires the learner to translate retained knowledge into a different form and requires him to interpret related knowledge on the basis of the characteristics of the retained knowledge so that he fully grasps the meaning of the given knowledge.

For example: a learner retains the pictorial percepts, "an apple in a bowl", "a ball in a box", and "a marble in a circle". If he can translate each of these pictorial percepts by physically putting an apple in a bowl, a ball in a box, and a marble in a circle and if he can interpret and translate a request to put "a spoon in the cup" (new, but related knowledge), "water in a glass", or "sand in a pail", he has shown comprehension of the concept "in".

Draw Conclusions--Determine the means by which interpreted concepts will be translated. For example: the learner is requested to "put water in a glass". His conclusion might be to translate by using water from a faucet, if one is available, or he might decide to pour water from a bucket.

Competencies--The habitual behaviors a learner develops to a degree sufficient for the intended purpose. For example; one of the social competencies we want learners to develop is the habitual action of showing consideration for others in a group so that they can better hold a job. Because the steps in developing this capability cannot be ordered exactly and because attitude development is also required, we call the desired behavior a competency rather than a skill.

The prescribed instructional steps, their materials and devices, are not given in the stated objective. The variety of possibilities for multi-sensory and multi-media instructions are so extensive that a statement of specifics within the objective would not be practical or desirable. Thus; the objective is stated so that the teacher will be free to prescribe the type and form of instruction that will insure successful achievement of the objective by the learner. (Examples of instructional steps, materials and devices, are provided for each objective in this teachers' guide booklet).

Assessment & Placement

After the first year of this new program, placement will not be much of a problem. Only new students entering special education later than during their first year of school will need continuous progress placement assessment after our first year. The reason why this will be so is that all of the curriculum is sequential. Once a learner is learning at his comfort pace, his learning becomes continuous and never ending. He "jumps" continuous progress instruction when a pre-test shows he already knows the skill or concept and continues on to the next objective. (See the annotated C. P. L. procedure chart on the next page of this guide).

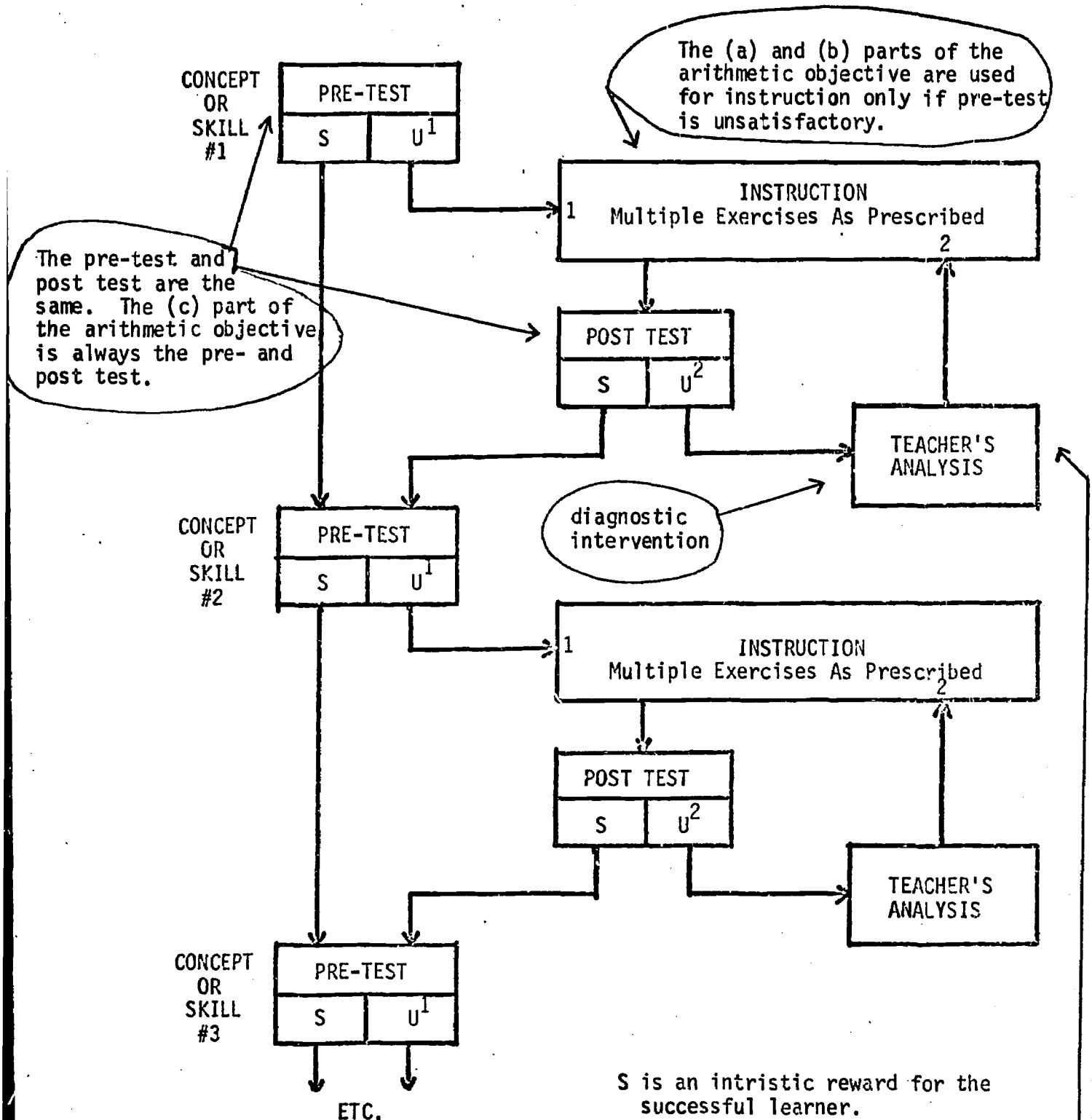
The process of assessment for continuous progress placement is relatively simple when only a few students need it. The following steps are required:

1. What is the chronological age of the learner? If 6, do not evaluate. If 7, evaluate with Plateau 1 pre-tests only. If 8, evaluate with Plateau 1 and 2 pre-tests only. If 9, evaluate with Plateau 1, 2, and 3 pre-tests only. And so on if older.
2. If 6, place on first objective of Plateau 1 and proceed according to the C. P. L. procedure chart.
3. If 7 and fails 70% of Plateau 1 pre-tests, place on first missed objective of Plateau 1 and continue with missed objectives until Plateau 1 is completed, then begin with first objective of Plateau 2 and proceed according to the C. P. L. procedure chart.

Follow the same assessment and placement procedure with other ages.

BE SURE THE LEARNER IS "READY" FOR ACADEMIC WORK. SEE THE P.E. SECTION OF THE CURRICULUM GUIDE FOR ASSESSMENT LOWER THAN THAT DESCRIBED ABOVE.

CONTINUOUS PROGRESS LEARNING



HOW TO CONDUCT THE LESSON

There are four possible stages in each lesson: (1) Teacher presentation and check on learner retention; (2) check on learner comprehension by translation; (3) individualized aid, if learner cannot immediately translate, until learner is successful; and (4) post test after instruction.

Each stage is described below and is keyed to the appropriate section of the instruction sheet. (See the annotated sample on page 13 of this guide).

1. Teacher Presentation and Check on Learner Retention Section (a)

Three different percepts are presented, as indicated by the drawings shown on the instruction sheet, using the stimulus/response technique.

For example: the teacher shows the learner a pre-drawn circle with a poker chip and a block lying outside of it. She says: "Watch me. I will put this chip in the circle." She puts the chip in the circle. (The block is left out and is not mentioned in this lesson). Then she asks the learner, "Which object is in the circle?" (Stimulus). She waits for the learner to answer. (Response). If he does not respond, or responds incorrectly, she repeats the percept presentation and asks the question again.

When the learner has responded correctly to each of the three stimuli, he is ready for the activity in section (b).

The teacher is not limited to the given examples, but whatever is used for section (a) must also be used for section (b). Only the size can be different.

2. Check on Learner Comprehension
Section (b)

In this stage the teacher provides the learner with the same materials she used for the presentation (or smaller duplicates).

The stimulus/response technique is also used here. For example: the teacher says, "Here is a circle. Now put a chip in the circle." If the learner does not respond, or responds incorrectly, to any of the three stimuli; move to stage 3. (If he puts a block in the circle instead of a chip, he is correct even though he may not know the difference between a chip and a block!)

When the learner has responded correctly to each of the three stimuli, he is ready for the post test in section (c).

3. Individualized Aid

If you have been instructing several learners at the same time, the learner who failed to respond correctly may need only a repetition of the instruction in a one-to-one situation.

If such repetition does not result in success, review your assessment and placement records and/or your diagnosis of "readiness" for arithmetic before attempting additional instruction on this plateau.

If you are still sure placement is accurate, repeat the instruction with very common objects such as a cereal bowl and a spoon ("Put the spoon in the bowl"), a box and a ball, and a M&M ("Put the M&M in your mouth").

4. Post testing
Section (c)

After the learner has completed instruction successfully, he is asked to perform the activities of section (c). He should have no

difficulty at this stage; but, if so, repetition of instruction, using different materials, will be required.

When the learner has successfully completed the post test activities, the teacher records his success on his Pupil Progress Record Sheet.

NOTE: In the above discussion we have referred to the (c) section of the objective as the pre- and post tests. Some objectives do not have (a), (b), and (c) parts. Such objectives are used to check and record generalized concepts and, thus, are the pre- and post tests for the concepts indicated. Instruction for such objectives will be the appropriate (a) and (b) parts of previous objectives the learner has achieved. The instructional guide sheet for these single part objectives will indicate the appropriate prior objectives which will be returned to for instruction if necessary. (See the sample instructional sheet on page 14 of this guide.)

Some single part objectives (38,39,40) test the ability of the learner to extrapolate (extend a known base concept to slightly different versions of it, such as close-closer, high-higher-highest). If the learner is not able to show comprehension at this more advanced level, the teacher should first check to be sure the learner still comprehends the base concept. If the base concept is known, the teacher will need to instruct the learner in relationships of words such as close and its mate closer. Most learners should be able to comprehend such extensions, however, if the base concept was generalized sufficiently.

Sample sheet

This is written to the teacher. It is not stated to the children.

SUGGESTED SCRIPT AND MATERIALS — LOCATION & DIRECTION 1

See page 6 of this guide.

OBJECTIVE

See page 5 of this guide.

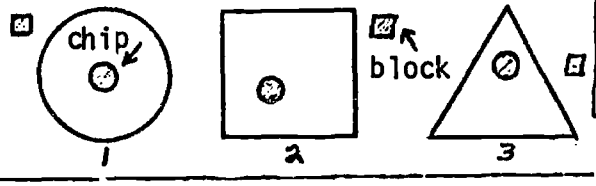
1. (a) Show retention of three of the percepts comprising the concept in by being able to recognize, during each of three presented activities, whether or not an object was placed or found in something.

Teacher waits for the learner's answer

INSTRUCTIONS TO STUDENT ← given orally by teacher or taped

In this lesson we are going to learn about in. Look at this.

1. Which object is in the circle?
2. Which object is in the square?
3. Which object is in the triangle?



guide to materials the teacher may use at this step

(Be sure learner responds correctly)

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1. (b) Show comprehension of three of the percepts comprising the concept in by being able to translate from mental percept to physical action the three retained percepts.

See page 6 of this guide

Now you do this:

The same materials are used for (b) as for (a) but the size may be different

1. Here is a circle. Now, put a chip in the circle.
2. Here is a square. Now, put a chip in the square.
3. Here is a triangle. Now, put a chip in the triangle.

The teacher pr- prepare the circle, square, & triangle on posterboard or ditto sheets.

---

1. (c) Show comprehension of the concept in by being able to interpret a concept of in, draw conclusions, and translate to physical action at least three in requests involving objects and locations similar to, but not exactly like, those given in step (a).

See page 6 for meaning of terms used.

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1. Here is a paper cup.
   Here are two beads.
   Put the beads in the cup.

2. Here are three sticks.
   Here is a box.
   Put the sticks in the box.

3. Here is a circle I have drawn on the floor.
   Put both your feet in the circle.

This step is used as both the pre-test and the post test after instruction. Instruction(a&b) is not done if the learner is successful on the pre-test.

This stage of performance involves acting upon the basis of generalizations. Classroom situations offer multiple and daily opportunities for such testing.

Sample sheet

OBJECTIVE

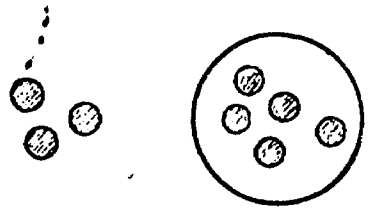
28. Show comprehension of the relationship between the concepts in and out by being able to interpret the concepts, draw conclusions, and translate to physical action at least three in and out requests which involve objects and locations similar to, but not exactly like, those given in previous in or out exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between in and out.

Do this:

1. Tell me how many chips are in the circle?
   How many chips are out of the circle?



#1 checks the skill of interpretation only. #2 and #3 will check both interpretation and translation.

2. Walk out the door. Now, come back in.

3. Put some beads in this glass. Now, pour them out.

Note: If learner is not successful, use instruction for objectives 1 and 2, plateau 1.

This is the single part objective discussed on page 11 of this guide. It is a pre- and post test, usually to determine if the learner comprehends the previously taught concepts so well he can use them together in some type of relationship.

#1 activity may test only interpretation in order to provide better diagnosis of his problem if he is unsuccessful. Such objectives may sometimes be one or more years apart from the original instruction.

INSTRUCTIONAL MATERIALS NEEDED FOR THIS PLATEAU

OBJECTIVE NUMBER →	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
pre-drawn forms	x	x	x	x	x		x				x	x			x							x
red blocks	1	1	1	1	1	1				5		1	3						2			
blue blocks					1	1				5			3					3				
yellow blocks					1	1				10			3					5				
red poker chips	1	1	1	1	1	1	5	3														
blue poker chips						1	3	2														
yellow poker chips						1																
red cuisianaire rods						1																
blue cuisianaire rods						1																
yellow cuisianaire rods						1																
plastic glass							1					3							1			
plastic bowl(small)												1										
paper cup																						
plastic coffee cup																			1			
red beads							10		5													
blue beads																						
yellow beads																						
pieces of string	1							1	5													
classroom boxes(9x12x1&2)								1					2				2	1			3	
magazine cutouts																						x
white paper(8½x11)					1									1								
bean bag																						
jump rope												1										
4 foot stick																						
classroom furniture		x	x	x	x	x				x	x	x						x	x	x	x	x
cloth(1 foot square)												2										
plastic spoon																						
plastic fork																						
plastic bottle																						
flannel board	x													x		x				x	x	
felt cutouts(see obj.)	x													x		x				x	x	
toy cars																	4			1	1	
coloring book																						
classroom books			1	1						1			x			1		1		1		
special corstruction									x												x	x

X= PLEASE REFER TO THE INSTRUCTIONAL EXAMPLE SHEETS FOR SPECIFIC DETAILS.

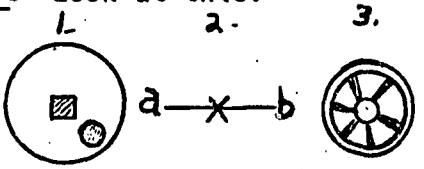
OBJECTIVE

22. (a) Show retention of three of the percepts comprising the concept center by being able to recognize, during each of three presented activities, whether or not an object was placed or found at or in a center location.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about center. Look at this.

1. Which object is in the center of the circle?
2. Which letter is at the center of the line?
3. Where is the center of the wheel?



(Use red for center mark)

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22. (b) Show comprehension of three of the percepts comprising the concept center by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a circle. Put a chip in the center of it.
2. Here is a line. Put X at the center point.
3. Here is a wheel. Color the center of the wheel red.

---

22. (c) Show comprehension of the concept center by being able to interpret a concept of center, draw conclusions, and translate to physical action at least three center requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

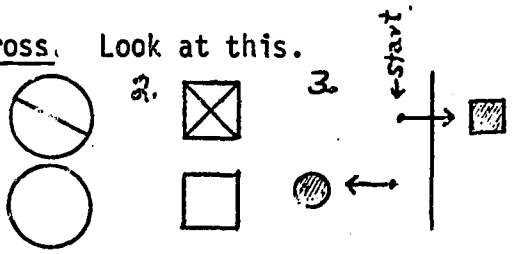
1. Walk to the center of the room.
2. Which window is the center one?
3. Find the center of this piece of string.

OBJECTIVE

23. (a) Show retention of three of the percepts comprising the concept <u>across</u> by being able to recognize, during each of three presented activities, whether or not an object was moving in the <u>across</u> direction.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about <u>across</u>. Look at this.



1. Which circle has a line drawn across it?
2. Which square has lines drawn across it?
3. Which object did I move across the line?

---

23. (b) Show comprehension of three of the percepts comprising the concept <u>across</u> by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a circle. Draw a line across it.
2. Here is a square. Draw two lines across it.
3. Here is a block and a line. Move the block across the line.

---

23. (c) Show comprehension of the concept <u>across</u> by being able to interpret a concept of <u>across</u>, draw conclusions, and translate to physical action at least three <u>across</u> requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

1. Walk across the room.
2. Jump across this line on the floor.
3. Who is sitting across the table from you?

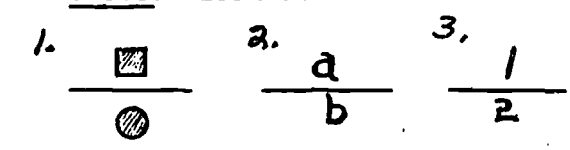
OBJECTIVE

24. (a) Show retention of three of the percepts comprising the concept above by being able to recognize, during each of three presented activities, whether or not an object was placed or found above something.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about above. Look at this.

1. Which object is above this line?
2. Which letter is above this line?
3. Which number is above this line?



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24. (b) Show comprehension of three of the percepts comprising the concept above by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a line. Put a block above the line.
2. Here is a line. Make an A above the line.
3. Here is a line. Write 1 above the line.

---

24. (c) Show comprehension of the concept above by being able to interpret a concept of above, draw conclusions, and translate to physical action at least three above requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

1. Hold your hand above your head.
2. What is above everything on earth?
3. Bring me the book on the first shelf above the bottom shelf.

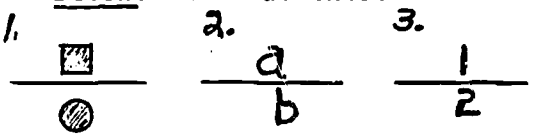
OBJECTIVE

25. (a) Show retention of three of the percepts comprising the concept below by being able to recognize, during each of three presented activities, whether or not an object was placed or found below something.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about below. Look at this.

1. Which object is below this line?
2. Which letter is below this line?
3. Which number is below this line?



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25. (b) Show comprehension of three of the percepts comprising the concept below by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a line. Put a chip below the line.
2. Here is a line. Mark a B below the line.
3. Here is a line. Write 2 below the line.

---

25. (c) Show comprehension of the concept below by being able to interpret a concept of below, draw conclusions, and translate to physical action at least three below requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

1. What part of your body is below your head?
2. What is below the sky?
3. Bring me the book on the first shelf below the top shelf.

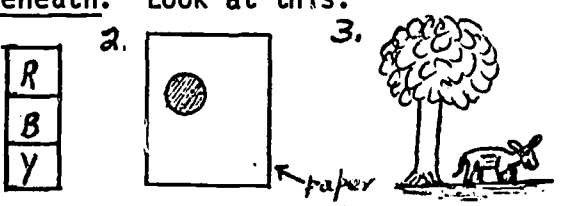
OBJECTIVE

26. (a) Show retention of three of the percepts comprising the concept beneath by being able to recognize, during each of three presented activities, whether or not an object was placed or found beneath something.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about beneath. Look at this.

1. Which block is beneath the red block?
2. What is beneath the chip?
3. What is standing beneath the tree?



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26. (b) Show comprehension of three of the percepts comprising the concept beneath by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a red block. Put a blue block beneath it.
2. Here is a chip. Put a sheet of paper beneath it.
3. Here is a tree. Draw a dog beneath the tree.

---

26. (c) Show comprehension of the concept beneath by being able to interpret a concept of beneath, draw conclusions, and translate to physical action at least three beneath requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

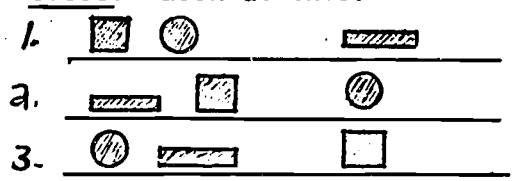
1. What is beneath this table?
2. What is beneath the top of the water in our aquariam?
3. What do you wear beneath your coat?

OBJECTIVE

27. (a) Show retention of three of the percepts comprising the concept close by being able to recognize, during each of three presented activities, whether or not an object was placed or found close to something.

INSTRUCTIONS TO STUDENT

In this lesson we are going to learn about close. Look at this.



1. Which object is close to the block?
2. Which object is close to the rod?
3. Which object is close to the chip?

---

27. (b) Show comprehension of three of the percepts comprising the concept close by being able to translate from mental percept to physical action the three retained percepts.

Now you do this:

1. Here is a block. Place a chip close to it.
2. Here is a rod. Place a block close to it.
3. Here is a chip. Place a rod close to it.

---

27. (c) Show comprehension of the concept close by being able to interpret a concept of close, draw conclusions, and translate to physical action at least three close requests involving objects and locations similar to, but not exactly like, those given in step (a).

---

1. Stand close to me.
2. Move your desk close to Bill's.
3. Walk close to the wall in the hall.

OBJECTIVE

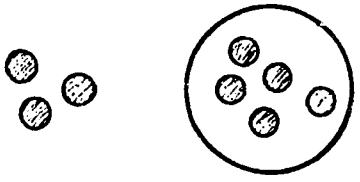
28. Show comprehension of the relationship between the concepts in and out by being able to interpret the concepts, draw conclusions, and translate to physical action at least three in and out requests which involve objects and locations similar to, but not exactly like, those given in previous in or out exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between in and out.

Do this:

1. Tell me how many chips are in the circle?
   How many chips are out of the circle?



#1 checks the skill of interpretation only. #2 and #3 will check both interpretation and translation.

2. Walk out the door. Now, come back in.

3. Put some beads in this glass. Now, pour them out.

Note: If learner is not successful, use instruction for objectives 1 and 2, plateau 1.

OBJECTIVE

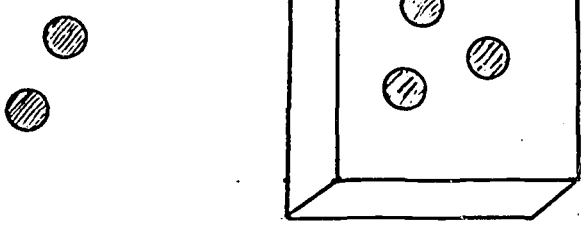
29. Show comprehension of the relationship between the concepts on and off by being able to interpret the concepts, draw conclusions, and translate to physical action at least three on and off requests which involve objects and locations similar to, but not exactly like, those given in previous on or off exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between on and off.

Do this:

1. Tell me, how many chips are on the box?
   How many are off the box?



2. Put this string on your finger.
   Now, take the string off.

3. Turn the lights on.
   Now, turn the lights off.

NOTE: If learner is not successful, use instruction for Objectives 3 and 4, plateau 1.

OBJECTIVE

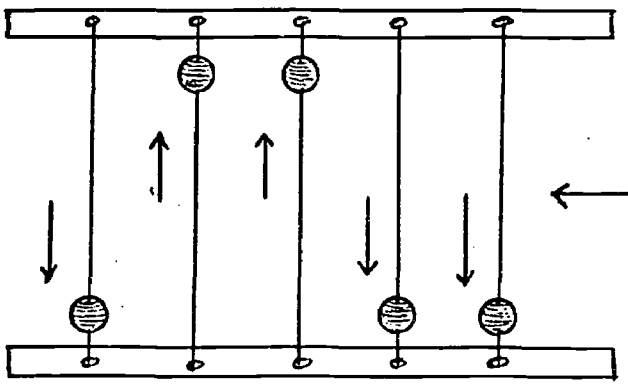
30. Show comprehension of the relationship between the concepts up and down by being able to interpret the concepts, draw conclusions, and translate to physical action at least three up and down requests which involve objects and locations similar to, but not exactly like, those given in previous up or down exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between up and down.

Do this:

1. Tell me, how many beads did I move up?
   How many did I move down?



2. Walk up the steps.
   Now, come down.

3. Stand on this chair. (Flat seat type)
   Jump down.
   Now, jump up.

NOTE: If learner is not successful, use instruction for Objectives 5 and 6, Plateau 1.

OBJECTIVE

31. Show comprehension of the relationship between the concept high and low by being able to interpret the concepts, draw conclusions, and translate to physical action at least three high and low requests which involve objects and locations similar to, but not exactly like, those given in previous high or low exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between high and low.

Do this:

1. Tell me, which blocks are up high?
   Which blocks are down low?

R	R	R	R	R
Y	Y	Y	Y	Y
Y	Y	Y	Y	Y
B	B	B	B	B

2. Take a book off a high shelf.
   Now, put the book on a low shelf.

3. Show me an object which is in a high place in the room.
   Now, show me an object which is in a low place in the room.

NOTE: If learner is not successful, use instruction for Objectives 9 and 10, Plateau 1.

OBJECTIVE

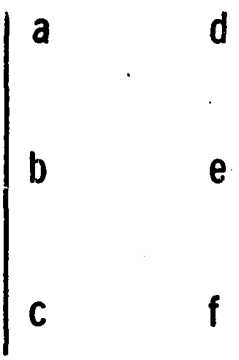
32. Show comprehension of the relationship between the concepts near and far by being able to interpret the concepts, draw conclusions, and translate to physical action at least three near and far requests which involve objects and locations similar to, but not exactly like, those given in previous near or far exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between near and far.

Do this:

1. Tell me, which letters are near the line?
   Which letters are far from the line?



2. Stand near the door.
   Now move far away from the door.

3. Move a chair that is far from me until it is near me.

NOTE: If learner is not successful, use instruction for Objectives 11 and 12, Plateau 1.

OBJECTIVE

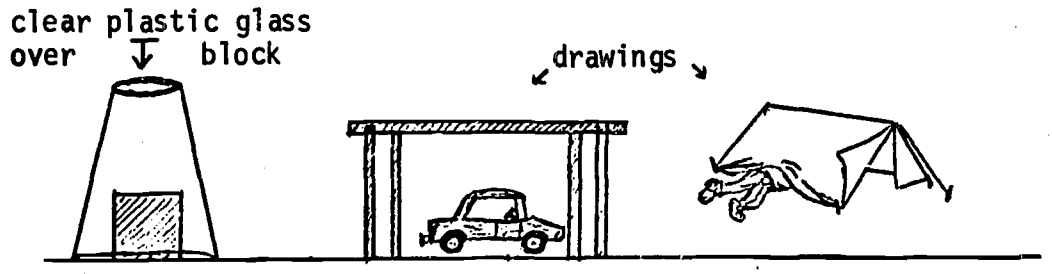
33. Show comprehension of the relationship between the concepts over and under by being able to interpret the concepts, draw conclusions, and translate to physical action at least three over and under requests which involve objects and locations similar to, but not exactly like, those given in previous over or under exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between over and under.

Do this:

1. Tell me, which objects are under something?
   Which objects are over something?



2. Step over this rope.
   Now, walk under it.

3. Put this cloth under the bowl.
   Now, lay this cloth over the bowl.

NOTE: If learner is not successful, use instruction for Objectives 7 and 8, Plateau 1.

OBJECTIVE

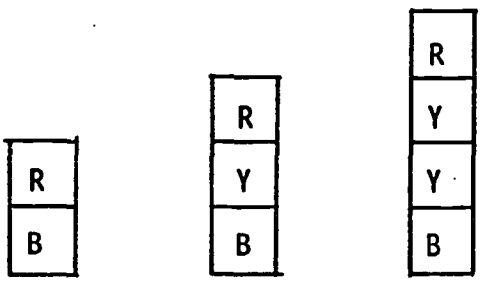
34. Show comprehension of the relationship between the concepts top and bottom by being able to interpret the concepts, draw conclusions, and translate to physical action at least three top and bottom requests whcih involve objects and locations similar to, but not exactly like, those given in previous top or bottom exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between top and bottom.

Do this:

1. Tell me, which blocks are on top of the stacks?
   Which blocks are on the bottom?



2. Take a book from the bottom of the stack and put it on top.

3. Put the little box on the top shelf and the big box on the bottom shelf.

NOTE: If learner is not successful, use instruction for Objectives 13 and 14, Plateau 1.

OBJECTIVE

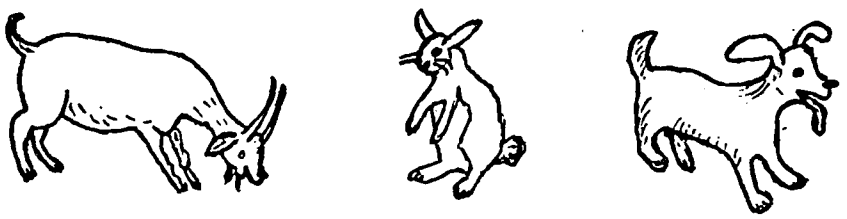
35. Show comprehension of the relationship between the concepts front and back by being able to interpret the concepts, draw conclusions, and translate to physical action at least three front and back requests which involve objects and locations similar to, but not exactly like, those given in previous front or back exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between front and back.

Do this:

1. Tell me, which animal is in front of the rabbit?
   Which animal is in back of the rabbit?



2. Draw a house on the front of your paper.
   Now, draw a boy or a girl on the back of the paper.

3. Put your hand on the front of you.
   Now, put your hand on your back.

NOTE: If learner is not successful, use instruction for Objectives 15 and 16, Plateau 1.

OBJECTIVE

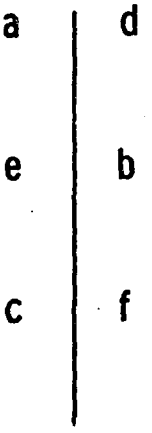
36. Show comprehension of the relationship between the concepts left and right by being able to interpret the concepts, draw conclusions, and translate to physical action at least three left and right requests which involve objects and locations similar to, but not exactly like, those given in previous left or right exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between left and right.

Do this:

1. Tell me, which letters are on the right side of the line?
   Which letters are on the left side?



2. Take two steps to your left.
   Take two steps to your right.

3. Point to your right eye.
   Now, point to your left ear.

NOTE: If learner is not successful, use instruction for Objectives 20 and 21, Plateau 1.

OBJECTIVE

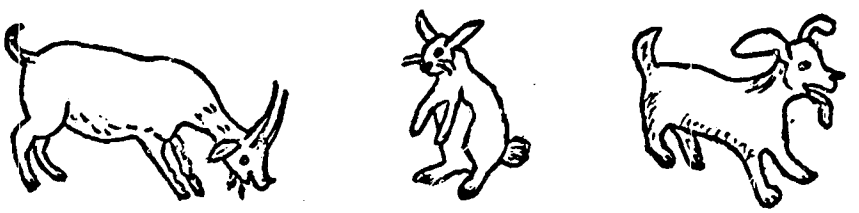
37. Show comprehension of the relationship between the concepts first and last by being able to interpret the concepts, draw conclusions, and translate to physical action at least three first and last requests which involve objects and locations similar to, but not exactly like, those given in previous first or last exercises.

INSTRUCTIONS TO STUDENT

I want to see if you still know the difference between first and last.

Do this:

1. Tell me, which animal is first in a line?
   Which animal is last in line?



2. Show me the first page in the book.
   Show me the last page in the book.

3. What is your first name?
   What is your last name?

NOTE: If learner is not successful, use instruction for Objectives 17 and 18, Plateau 1.

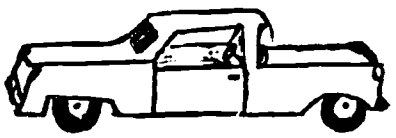
OBJECTIVE

38. Show comprehension of the relationship between the concepts close and closer by being able to interpret the concepts, draw conclusions, and translate to physical action at least three close and closer requests which involve objects and locations similar to, but not exactly like, those given in previous close exercises.

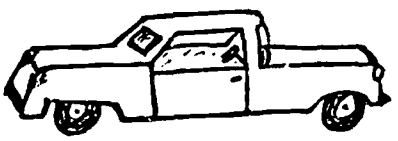
INSTRUCTIONS TO STUDENT

1. You have learned about things that are close to each other. Now show me how to make things be closer.

   Here are two sets of cars.
   (a)Which set are closer together?



use toy cars



(b)Move the back car closer to the front car.

2. These two boxes are close.
   You move them closer together.

3. You are sitting close to me.
   Move closer.

NOTE: If learner does not remember the concept close, use instruction for Objective 27, Plateau 1.

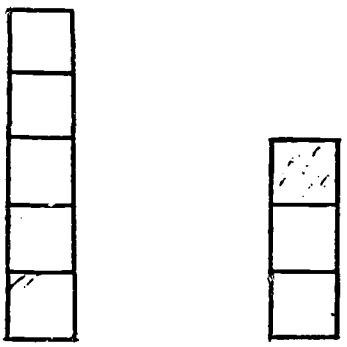
OBJECTIVE

39. Show comprehension of the relationship between the concepts higher and lower by being able to interpret the concepts, draw conclusions, and translate to physical action at least three higher and lower requests which involve objects and locations similar to, but not exactly like, those given in previous high or low exercises.

INSTRUCTIONS TO STUDENT

1. You have learned about things that are high and low. Now show me how to make things higher or lower.

   Here are two stacks of blocks.
   (a)Which stack is higher?



   (b)Make the high stack lower. Make the low stack higher.

2. Stand on the bottom step.
   Now, go two steps higher.
   Now, go one step lower.

3. Move the book to a higher shelf.
   Move the box to a lower shelf.

NOTE: If learner does not remember the concepts high and low, use instruction for Objectives 9 and 10, Plateau 1.

OBJECTIVE

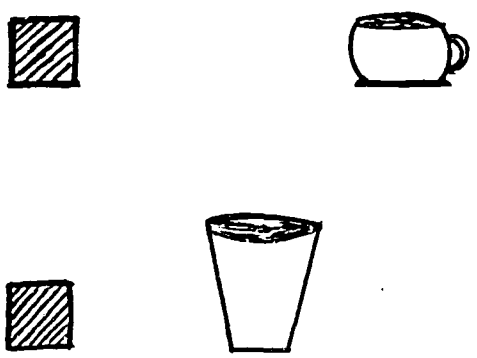
40. Show comprehension of the relationship between the concepts nearer and farther by being able to interpret the concepts, draw conclusions, and translate to physical action at least three nearer and farther requests which involve objects and locations similar to, but not exactly like, those given in previous near or far exercises.

INSTRUCTIONS TO STUDENT

1. You have learned about near and far. Now show me how to make things nearer or farther.

   Here are some objects and blocks.
   (a) Which is nearer to the block, the cup or the glass?
   Which is farther away from the block, the cup or the glass?

   (b) Move the cup nearer to the block.
   Move the glass farther away from the block.



2. Sit nearer to the table than I am.
   Now, move farther away from the table than I am.

3. Who is nearer to the door, you or me?
   Who is farther from the door, you or me?

NOTE: If learner does not remember the concepts near and far, use the instruction for Objectives 11 and 12, Plateau 1.

OBJECTIVE

41. Show comprehension of the relationship between the concepts up, high, above and top by being able to interpret the concepts, draw conclusions, and translate to physical action at least three up, high, above and top requests which involve objects and locations similar to, but not exactly like, those given in previous up, high, above, or top exercises.

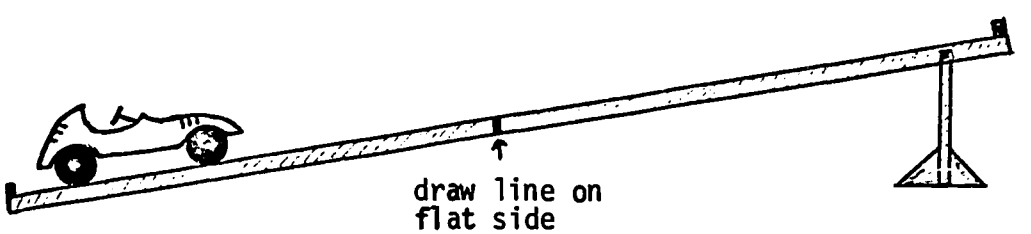
INSTRUCTIONS TO STUDENT

I want to see if you know the difference between the words up, high, above, and top.

Do this:

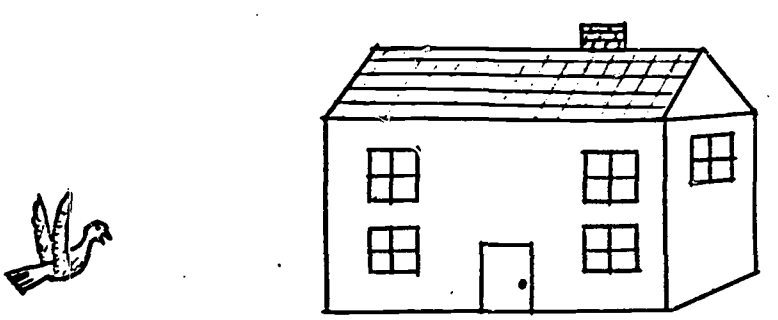
1. Pick this book up.
   Hold it high.
   Put it above the third shelf, but do not put it on the top shelf.

2. Here is a car and a board with a line on it.



   Push the car up the board.
   Stop just above the line.
   Is the car higher than before?
   Now, push the car to the top of the board.

3. Here are pictures of a house and a bird. (Use flannel board)



   Move the bird up above the top of the house. Is the bird higher than before?

NOTE: If the learner is not successful, use instruction for objectives 5, 9, and 13 of Plateau 1 and 24 of Plateau 2.

OBJECTIVE

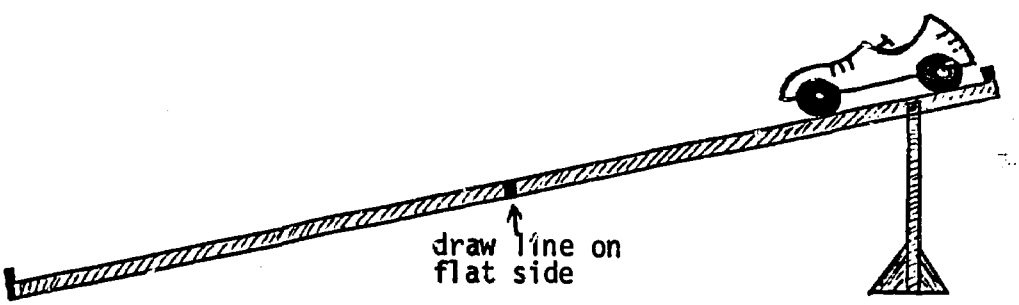
42. Show comprehension of the relationship between the concepts down, low, below, and bottom by being able to interpret the concepts, draw conclusions, and translate to physical action at least three down, low, below, and bottom requests which involve objects and locations similar to, but not exactly like, those given in previous down, low, below, or bottom exercises.

INSTRUCTIONS TO STUDENT

I want to see if you know the difference between the words down, low, below and bottom.

Do this:

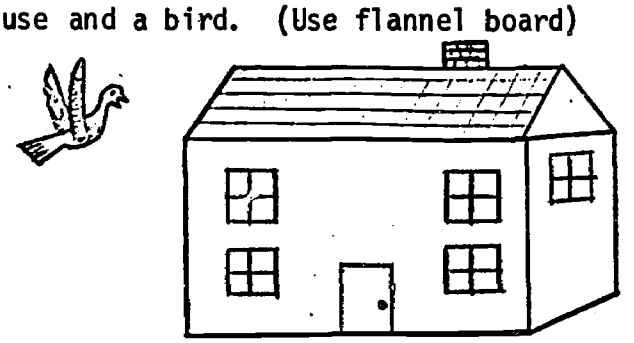
1. Here is a car and a board with a line on it.



Push the car down the board.
Stop it just below the line.
Is the car lower than before?
Now push the car to the bottom of the board.

2. Here are boxes and a bookshelf.
Put #1 box on the top shelf.
Put #2 box on a shelf below the top shelf.
Put #3 box on the bottom shelf.
Move #1 box down one shelf.
Move #2 box to a lower shelf.

3. Here are pictures of a house and a bird. (Use flannel board)



Move the bird down below the low window. Is the bird at the bottom of the house?

NOTE: If the learner is not successful, use instruction for Objectives 6, 10, and 14 of Plateau 1 and 25 of Plateau 2.

OBJECTIVE

43. Show comprehension of the relationship between the concepts top, center, and bottom by being able to interpret the concepts, draw conclusions, and translate to physical action at least three top, center, and bottom requests which involve objects and locations similar to, but not exactly like, those given in previous top, center, or bottom exercises.

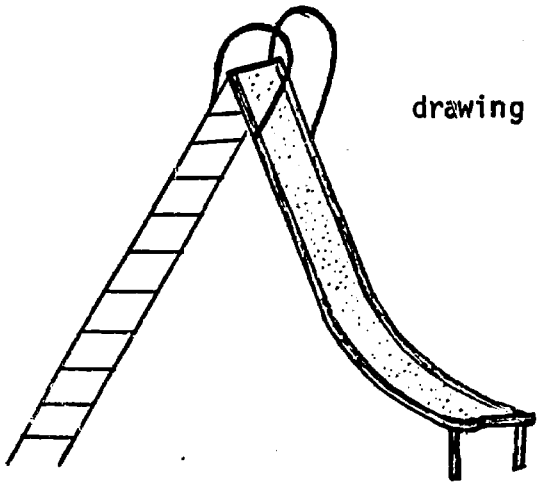
INSTRUCTIONS TO STUDENT

I want to see if you know the difference between the words top, center, and bottom.

Do this:

1. Here is a slide and some pictures.
   Place a girl at the center of the slide.
   Place a dog at the bottom.
   Place a boy at the top.

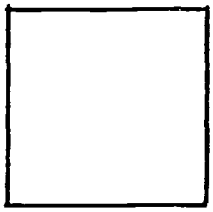
   (Use magazine cutouts for boy, girl and the dog.)



drawing

2. Pull out the top drawer of the cabinet.
   Pull out the bottom drawer of the cabinet.
   Pull out the center drawer of the cabinet.

3. Here is a square.
   Put a 1 at the top, a 2 at the bottom and a zero in the center of the square.



NOTE: If the learner is not successful, use instruction for Objectives 13 and 14 of Plateau 1 and 22 of Plateau 2.